REMARKS

The Office Action mailed August 16, 2006 considered claims 1-22. Claims 1-3, 5, 9-14, and 19-22 were rejected under 35 U.S.C. 102(b) as being anticipated by Willan (US 5,239,292) hereinafter *Willan*. Claims 4, 6, 7, 15, and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Willan* in view of O'Connor et al. (US 6,188,392) hereinafter *O'Connor*. Claims 8, 17, and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Willan* in view of Yamashita (JP 06-019614) hereinafter *Yamashita*.[1]

By this paper, claims 1, 4, 9, and 18 are amended and claim 23 is new.[2] Claim 3 is cancelled. Accordingly, Claims 1, 2, and 4-23 are pending, of which claims 1, 9, and 18 are the independent claims at issue.

As recited in the claims, the invention is generally directed to generating line thickness information. The method recited in claim 1, for example, defines a writing instrument configured to detect, relative to itself and using an accelerometer, pulses representing ballistic information about the writing instrument. The represented ballistic information includes represented acceleration information from a user's handwriting. Claim 1 further defines a conversion component configured to receive the pulses representing ballistic information, including the represented acceleration information from the user's handwriting, directly from the writing instrument. The conversion component is also configured to convert the received pulses representing the acceleration information to generate line thickness information for a digital representation of portion of the user's handwriting that is to be displayed on a display device.

Claim 9 is similar to claim 1 using plots of movement information. Claim 18 is similar to claim 9 using tilt information.

In the office action claims 1, 9, and 18 were rejected using *Willan* as the primary reference. *Willan* describes a computer graphics system electronically simulating painting on a canvas. From X, Y, and Z co-ordinates, other differential derivatives with respect to time of the input device position can be determined. (Col. 3, ll. 13-46 and Figures 1 and 2). A field

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[1] Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

[2] Support for the amendments to the claims are found throughout the specification, Figures, and previously presented claims, including, paragraphs [0006], [0041]-[0048], and [053], and Figures 2 and 3. (Paragraph Numbers from U.S. Pat. Appl. Pub. No. 2002/0163510).

transform calculation is performed based and X, Y, and Z co-ordinates, any derivatives, and a pre-defined three dimensional field model to eventually produce desired painting effects, e.g., paint slippage (Col. 4, ll.21-44). The position of an input device can be measured at successive timing intervals. The change in spacing and relative inclinations between adjacent lines is a measure of acceleration. The system can be used to paint circular shapes and simulate splash effects. (Col. 4, l. 45 – Col. 5 l. 7).

Some dependent claims were rejected over *Willan* in view of *O'Connor*. *O'Connor* describes an electronic pen device. The device includes acceleration sensors that can measure X and Y directions in a three-dimensional space. The data can be processed later to determine speed, position, angular information, etc. (Col. 4, ll. 26-40). Information from the acceleration sensors can be transferred to a computer. (Col. 6., ll. 3-22 and Figure 2).

Claim 18 and other dependent claims were rejected *Willan* in view of *O'Connor* in view of *Yamashiti*. *Yamashiti* describes a handwritten graphic input device. A line width control means controls a line width at the time of display locus of a stylus pen based on a detected angle detected by means 102. (Constitution). An include angle between a stylus and pen and tablet can be calculated by detecting the transceiver condition of a stylus pen and the RF signal between tablets. ([0013] – [0014] and Figure 3).

However, the art does not anticipate or make obvious Applicant's inventive system for generating digital ink thickness. However, the cited art does not anticipate or make obvious a conversion component configured to receive the pulses representing ballistic information, including the represented acceleration information from the user's handwriting, directly from the writing instrument and to convert the received pulses representing the acceleration information to generate line thickness information for a digital representation of a portion of the user's handwriting that is to be displayed on a display device, as recited in claim 1. For at least this reason, applicants submit that claims 1, 9, and 18 patentably define over the prior art of record.
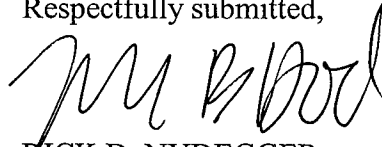
Each of the dependent claims depend form one of the claims 1, 9, and 18 and thus patentably define over the art of record at least for the same reason. However, some dependent claims also independently distinguish over the cited art. For example, the cited art does not anticipate or make obvious a writing instrument is configured to detect pulses from an accelerometer representing tilt information about the writing instrument, as recited in claim 23.

In view of the foregoing, Applicants respectfully submit that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicants acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicants reserve the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicants specifically request that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 21st day of September, 2006.

Respectfully submitted,

RICK D. NYDEGGER
Registration No. 28,651
MICHAEL B. DODD
Registration No. 46,437
Attorneys for Applicant
Customer No. 47973

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